

REMARKS

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action of November 15, 2005.

Reconsideration of the Application is requested.

The Office Action

Claims 1, 6 and 7 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as his invention.

Claims 1-5 stand rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Claims 1-4, and 6 stand rejected under 35 U.S.C. §102(e) as being anticipated by Baker et al. (U.S. Application No. 2004/0163544 A1).

Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Baker as applied to claim 1, and further in view of U.S. Patent No. 5,212,635 issued to Ferriter.

Claims 7-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Baker and U.S. Patent No. 6,321,243 issued to Ballard.

Telephonic Interview

A telephonic interview was held with the Examiner on March 20, 2005. One of the subjects discussed related to the §112 rejection of claims 1, 6 and 7, particularly regarding the meaning of the terms "understandable" and "understood." The Examiner is of the opinion that the terms "understandable" and "understood" are subjective terms, and cannot be given reasonable meaning. While Applicants respectfully traverse the Examiner's opinion and rejection, the subject claims have each been amended to include an objective standard defining the degree of understanding necessary to perform the desired process. Possible amendments were discussed with the Examiner.

A second subject was the § 101 rejection of claims 1-5 which was based on the Examiner's assertion that the claims are directed to software but lacking the necessary hardware. The subject matter of claims 1-5 was discussed with the Examiner, however, without reaching an agreement. Again, possible amendments were proposed by Applicants.

The final subject is regarding the § 102 and § 103 rejections which appeared to

repeat the rejections stated in the Final Office Action, but against which we successfully argued in the Pre-Appeal Brief Request for Review resulting in a Panel Decision to reopen prosecution following a Pre-Appeal Brief Request for Review. It is Applicant's understanding that these rejections were restated in the Office Action of November 15, 2005 because the Final Office Action of February 22, 2005 was withdrawn in the Notice of Panel Decision from Pre-Appeal Brief Review mailed September 8, 2005.

With reference to all of the above-mentioned possible amendments, the Examiner indicated that further consideration and/or search would be needed when a formal response to the previous Office Action is received by the Examiner.

It is believed by Applicants that the discussion above reflects the substance of the interview.

#### The Non-Art Rejections

##### Claims 1 and 6 not Indefinite

In the Office Action of November 15, 2005, the Examiner states that independent claims 1, 6, and 7 claim the limitations: "wherein elected ones of the action glyphs, material glyphs and instrumentation glyphs are arranged in relationship to each other in accordance with a predetermined structure to form a specific instruction *understandable* by the person following the instruction irrespective of the written language" on lines 11-15 of claim 1; "arranging the selected glyphs in relationship to each other in accordance with a predetermined structure to form a specific instruction *understandable* by the person following the instruction irrespective of the written language understood by the person" on lines 14-17 of claim 6; and "an input device by which a user enters instructions in a language *understood* by the user". The Examiner asserts that the terms "understandable" and "understood" used in the limitations recited above are subjective terms, and therefore cannot be given reasonable meaning. Applicants respectfully traverse the Examiner's opinion in this regard and the subsequent §112 rejection for the reasons set forth below.

With reference to independent claims 1 and 6, the Examiner asserts that a person's understanding of an instruction is different than another person's understanding of the instruction. The Examiner adds that the specification has not provided any objective definition identifying a standard for determining when an instruction is understandable by a user, or what constitutes an understandable instruction. Applicants respectfully contend that the Examiner is clearly wrong in these

assertions.

First of all, with respect to the Examiner's statement that one person's understanding of an instruction may be different than another person's understanding, the present application is clearly directed to instructions regarding process steps, and the person viewing the glyphs only needs to understand sufficiently to perform the task.

The application itself offers a good example in paragraph 23 on page 4, quoted here for the Examiner's convenience: "Additionally, in countries which do not use such an ideogram-based language, many uses of symbols or icons are implemented such as street signs, and are known and understood world-wide." The application makes it clear that it is directed toward symbols or icons (glyphs) that are readily understood by any person. The application and recited limitations in the subject claims are directed to manufacturing process instructions where there is no ambiguity such that one person may interpret the instruction differently than another person. This would clearly lead to one person performing an incorrect instruction which is contrary to the intent of the present application as evidenced by this excerpt from Paragraph 26 (page 4): "The glyphs, part numbers and tooling numbers are arranged in accordance with the accepted grammar and syntax to form complex extended glyph instructions which are simple to follow irrespective of what language the user understands."

Secondly, with respect to the Examiner's statement that the specification has not provided any objective definition identifying a standard for determining when an instruction is understandable by a user, the Examiner is again incorrect. Paragraph 40 (page 8) states: "It is noted that an intent of the present embodiment is to provide an end user, i.e. a person following the instructions, with a simple process of understanding the manufacturing process to be undertaken." Clearly the instant application sets forth a clear standard regarding understanding. In other words, the standard for determining when an instruction is understandable is that the person following the instructions understands the manufacturing process to be undertaken. Manufacturing processes are not philosophical processes where one person may interpret reality differently than another person. A person either understands what steps to take to perform the process or not. It is clear in the present application and claim limitations that the person only needs to understand the process sufficiently to successfully perform the process.

Further, regarding a standard for the word "understood," Applicants respectfully point out that the preamble of each of independent claims 1 and 6 provides at least one

standard, namely that the person is someone who understands a written language.

Although Applicant's respectfully traverse the Examiner's opinion with regard to the limitations which recite the words "understandable" and "understood", claim 1 has been amended so that the phrase "...a specific instruction understandable by the person following the instruction..." now reads "...a specific instruction for performing the process..." to remove any ambiguity regarding the word "understandable" in the recited limitation. Claim 6, as amended, now includes the phrase "understandable by the person following the instruction to successfully perform the process irrespective of the written language understood by the person" to clearly define the level of understanding required, i.e., enough to perform the process.

Further, Applicants wish to draw to the Examiner's attention that many issued patents have claims reciting the term "understandable" in a context similar to the present patent application. For example, in U.S. Patent No. 6,988,084 issued to DiBacco for an automated system for analyzing charges and credits of banks and other institutions, each of claims 7 and 18 recite a limitation "wherein the standardized service descriptions are understandable by a layperson." Applicants can find no definition in the respective specification defining a level of understanding associated with the phrase "understandable by a layperson." Clearly, the level of understanding by the layperson in DiBacco only needs to be sufficient to have a basic understanding of the standardized service description. Similarly, in the present application, the person only needs a level of understanding sufficient to perform the instruction represented by the glyph(s).

For the above-stated reasons, Applicants respectfully request that the Examiner withdraw the §112 rejections of independent claims 1 and 6, as amended.

**Claim 7 not Indefinite**

With reference now to independent claim 7, the limitation in question recited "an input device by which a user enters instructions in a language understood by the user." Unlike claims 1 and 6, there is no question regarding the level of understanding that a person has regarding an instruction to the person because, in the recited limitation, it is the person giving the instruction to the system for creating pictographic instructions. The only requirement regarding a level of understanding in the limitation is that the person understand a language well enough to express the instruction in that language. There is no question regarding levels of understanding of the instruction in this claim. However, to further clarify the limitation and remove any possible ambiguity, the above-

mentioned limitation of the subject claim has been amended herein to read "an input device by which a user selects a language and enters instructions in the selected language." Support for this limitation can be found in paragraph 52 on page 11 of the present application. The following limitation in claim 7, as amended, recites a "translator configured to receive the inputted instructions and to interpret the inputted instructions so as to select ones of the action glyphs, material glyphs and instrumentation glyphs which represent the inputted instructions." Clearly, the person only needs a level of understanding of at least one language to be capable of selecting that language and expressing the instruction well enough that the recited translator can select appropriate glyphs for the instruction.

For the above-stated reasons, Applicants respectfully request that the Examiner also withdraw the §112 rejection of independent claim 7, as amended.

**Claims 1-5 Directed to Statutory Subject Matter**

With reference now to claims 1-5, the Examiner asserts that claims 1-5 are not tangible for the reason that the preamble recites a system and the claimed features and elements of claim 1 do not include hardware components or features that are necessarily implemented in hardware. The Examiner is correct in that claim 1 as originally filed did not include hardware components in the recited limitations, however, the Examiner is wrong in stating that the claimed features and elements are necessarily implemented in hardware. In fact, paragraph 49 (page 10) of the present application specifically describes two embodiments of the application: "In some instances the instructions may be constructed simply by cutting and pasting individual glyph images in a sequence in accordance with the syntax and grammar rules. An alternative embodiment provides a computer system to generate the glyph instructions." Although the alternative embodiment clearly requires hardware components, the first-described embodiment does not. The use of the word "system" in the preamble does not necessarily describe a hardware system. For example, one of the listed definitions for "system" in the Merriam-Webster dictionary is "an organized set of doctrines, ideas, or principles usually intended to explain the arrangement or working of a systematic whole", while another listed definition is "an organized or established procedure", and the first-described embodiment includes a manual system not requiring any hardware components. The first-described embodiment more closely fits these definitions of a system.

Although Applicants traverse the Examiner's §101 rejection of claims 1-5 as

being directed to non-statutory subject matter, independent claim 1 has been amended to recite limitations which specifically enable either a manual or a hardware implementation of the recited system. In particular, the glyphs are recited as being either cut glyphs or glyph images stored on a computer while the arranging of the glyphs can be performed either manually or by means of the computer.

For the above-stated reasons, Applicants respectfully request that the Examiner withdraw the §101 rejections of independent claim 1, as amended, and claims 2-5 depending therefrom.

### **The Art Rejections**

#### **§ 101 and § 102 Rejections Should be Withdrawn**

Applicants respectfully traverse all of the §102 and §103 rejections. The Examiner appears to have reiterated the same §102 and §103 rejections provided in the Final Office Action mailed February 22, 2005 which was withdrawn in the Pre-Appeal Brief Request for Review mailed September 8, 2005. However, because the arguments provided by Applicants in the Pre-Appeal Brief Request for Review filed July 22, 2005 were successful in causing the Panel to reopen prosecution of the application, Applicants believe that the arguments presented in the subject Pre-Appeal Brief Request for Review offer sufficient reason for the §102 and §103 rejections to be withdrawn. For the Examiner's convenience, those arguments are quoted below:

Applicants respectfully submit the cited Baker reference (U.S. Application No. 2004/0163544 A1) which was used as the primary reference in rejecting claims 1-9 of the present application, and the only reference cited against claims 1-4 and 6, has been misunderstood by the Patent Office.

In brief, Applicants respectfully submit the cited Baker reference to be entirely inappropriate.

The present application discloses and claims a system and method for generating pictographic instructions understood by a user following the instructions, regardless of the user's language. This feature is recited in each of the independent claims 1, 6, and 7. On the other hand, the cited Baker reference discloses concepts directed to a user inputting instructions to a PDA type of device for the PDA to act upon (Abstract). Baker does not teach generating an instruction understandable by the person following the instruction, irrespective of the written language understood by the person—as recited in the claims of the present application. Rather, Baker teaches that it is a user who works to generate an input instruction to be understood and performed by the PDA or computing system.

Further, there is no teaching or suggestion in Baker that a user can understand the

symbols regardless of the user's language. For example, on page 15, paragraph 150, Baker discusses the calculator symbol 22a of Figure 1, among other symbols 22b-22f, but each symbol is associated with an English subtitle, thereby indicating a possibility that the user may not understand the symbol. Even the "stop" symbol discussed on page 4, paragraph 40, and shown in Figure 2, contains the English word "stop" to clarify its meaning. There is no suggestion that the stop sign is universally understood by users that only understand non-English languages. But again, as pointed out above, it is not the user performing the indicated instructions as taught by the present application, but instead, as taught by the reference, the computing device.

Applicants requested a telephone conference on two occasions to discuss the inappropriateness of the cited art, and what Applicants believe to be a lack of response to Applicant's arguments. Both requests were denied in view of the application being in an After Final status. Applicants, therefore, filed a second response re-submitting the arguments which they believed were not responded to, and asked for a reconsideration of the application because the general statements made in the Advisory Action mailed June 10, 2005 did not meet the requirement that a specific response be provided. However, another Advisory Action rejecting all remaining claims was mailed on July 21, 2005, but not yet received as of this date.

Thus, in a first response to the Office Action mailed February 22, 2005, Applicants requested a showing of a disclosure in the cited references that, e.g., the symbols taught by Baker, and referred to by the Examiner in paragraph 2 of the most recent Office Action, represent instructions to be followed by a person who understands the instructions irrespective of the written language understood by the person. No response to this request was provided in the Advisory Action mailed June 10, 2005. Applicants respectfully submit there has been no showing of the essential elements needed for a *prima facie* rejection of the independent claims 1, 6, and 7.

Applicants respectfully further submit, with reference to claims 1 and 6, that there has been no showing in any of the cited references a teaching corresponding to the limitation included in each of claims 1 and 6 that selected ones of the action glyphs, material glyphs and instrumentation glyphs are arranged in relationship to each other in accordance with a predetermined structure to form a specific instruction understandable by the person following the instruction irrespective of the written language understood by the person.

Further, with reference now to dependent claim 3, it has been argued in the Office Actions that Baker teaches the user creating a command sequence using the symbols "new" representing an action symbol, "all" representing a material symbol, and "file cabinet" representing an instrument symbol. Applicants respectfully submit that "new" does not represent an action, and that the referenced Figures 8c and 8d do not clearly show a glyph representing either "new" or "all." Further, a dictionary definition of "material" was provided in the Office Action mailed February 22, 2005, and the word "all" does not conform to any of the meanings provided by the Merriam-Webster definition.

Additionally, with reference to claim 1, In the Examiner's Response to Arguments, paragraph 9 of the current Office Action, the Examiner asserts that claim language such as 'wherein' merely suggests limitations or makes limitations optional. In

using claim language such as 'wherein' applicant has not required steps to be performed or limited an apparatus to a particular structure."

Applicants respectfully traverse the Examiner's opinion that the wherein clause, as recited in original claim 1 is an optional limitation, or can be construed to be optional. Although, as the Examiner pointed out from MPEP §2106, language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or a claim limitation, Applicants submit that the "wherein" clause is listed in MPEP §2106 only as an example of language that may raise a question as to the limiting effect of the language in a claim, as stated in the same section of the MPEP. Applicants respectfully submit that the MPEP does not state that a wherein clause is to be automatically considered as an optional limitation. Applicants further submit that the wherein clause as recited in claim 1 is fully intended to be a required limitation of the claim, particularly with respect to the phrase "to form a specific instruction understandable by the person following the instruction irrespective of the written language understood by the person." In view of the above, Applicants further request that the Examiner fully consider the limitations of independent claim 1, as amended, with regard to patentability over the cited references.

Further, with reference to claim 7, in paragraph 7 of the current Office Action, the Examiner asserts that Ballard teaches a glyph instruction generating system. Applicants respectfully traverse this assertion. Ballard essentially teaches a system for laying out a paragraph in a word processing program by replacing each character of text with a glyph corresponding to a selected font. That is to say, "Laying out a paragraph using a layout services library. An entire paragraph is defined as a single text run. The text run is laid out by substituting glyphs for the characters of the text run and then positioning the glyphs" (Abstract). In other words, Ballard is simply using glyphs to represent the characters of the document on a one-for-one basis, except for ligatures which may be on a one-for-two or other basis (col. 1, lines 25-27 and col. 5, lines 50-61). Applicants fail to see how a single character, or a single ligature, can be interpreted as an instruction, action or material. It would be extremely difficult, if not impossible, to create "instructions understandable by a person following the instructions to perform a process, irrespective of which written language is understood by the person following the instructions" utilizing the glyphs of Ballard which represent only single characters or ligatures of the text run.

Ballard neither teaches nor suggests translating the glyphs which form the paragraphs so that they can be understood irrespective of which language is understood by the person following the instructions. For example, if the text run is written in the Russian language, each character of the Russian text run will be replaced by a glyph depending on the chosen font as taught by Ballard. There is no provision in Ballard for translating the text run or glyphs so that they can be understood by a person understanding a different language, such as English for example, let alone making the text run understandable by any person irrespective of which written language is understood by the person.

For the foregoing reasons, Applicants respectfully submit that independent claims 1, 6 and 7, as amended, and claims 2-5 and 8-9, as amended, depending respectively from claims 1 and 7, patentably define over the cited references.

Applicants submit that all claims remaining in the present application are in condition for allowance. It is further submitted by Applicants that the aforementioned amendments do not introduce any additional limitations beyond those included in the respective claims as originally filed. The amendments have been made only to clarify and reinforce the intended meaning of the limitations originally filed, and no new material has been added thereby.

Claims 1-9 remain in this application.

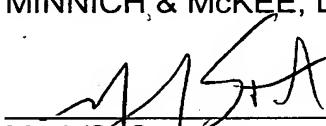
**CONCLUSION**

For the reasons detailed above, it is submitted all claims remaining in the application (Claims 1-9) are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Mark S. Svat, at Telephone Number (216) 861-5582.

Respectfully submitted,

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